KUSTOM

OWNER'S MANUAL

KAA65

Thank you for purchasing the Kustom KAA65 model acoustic/electric guitar amplifier. Kustom has listened to musicians throughout the world and stands proudly behind each and every one we make. It was designed with your needs in mind. Flexible, feature laden, great sounding, able to adapt to all kinds of music, this amplifier really delivers what you have been looking and waiting for. Whatever style you choose, it's ready! Kustom, with a 30 year tradition of excellence in design, proudly delivers to you this amp and rewards you with a rugged and dependable amp designed and engineered in the USA. Again, thank you for your purchase. Please take a few minutes to learn about all the professional features that are built in.

SPECIFICATIONS								
Model	Power	Equalizer	Channels	Impedance	Effects	Amplifier Type	Dimensions	Weight
KAA65	65 W	Dual 3 Band	Two	8 Ohms	8 Preset Digital EFX	MOS-FET Transistor	21"x11.5"x17.5" 53.4x29.21x44.5cm	48 lbs. 21.1 kg.

DANGER

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY TO NOISE INDUCED HEARING LOSS BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME.

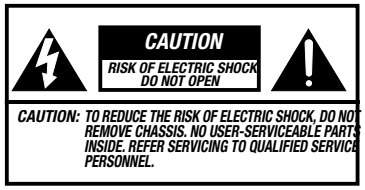
THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES:

DURATION PER DAY IN HOURS	SOUND LEVEL db FLOW RESPONSE
8	90
6	93
4	95
3	97
2	100
1	103
1/2 HR. or LESS	110

ACCORDING TO OSHA, ANY EXPOSURE IN THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS. EAR PLUGS OR PROTECTORS IN THE EAR CANAL OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS. IF EXPOSURE IN EXCESS OF THE LIMITS AS PUT FORTH ABOVE, TO INSURE AGAINST POTENTIALLY HARMFUL EXPOSURE TO HIGH SOUND PRESSURE LEVELS. IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF INDUCING HIGH SOUND PRESSURE LEVELS, SUCH AS THIS AMPLIFICATION SYSTEM, BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

WARNING!

- THIS APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. NO OBJECTS FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON THE APPARATUS.
- TO AVOID ELECTRICAL SHOCK, DO NOT DISASSEMBLE. REFER SERVICING TO QUALIFIED PERSONAL ONLY!



AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR.

THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE UNIT.

IMPORTANT

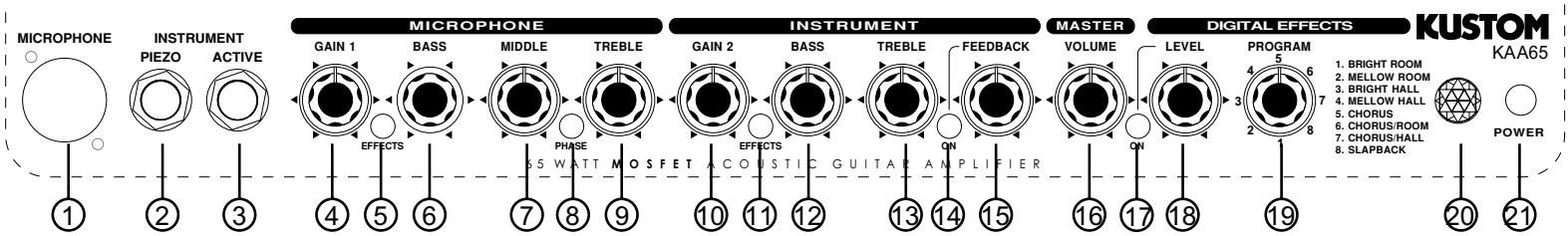
1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be kept for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water i.e. bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat, such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type indicated on the back of the amplifier near the power supply cord.
9. Do not break off the ground pin of the power supply cord.
10. Power supply cords should always handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts and vinyl covering may be cleaned with a damp rag.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
15. This unit should be checked by a qualified service technician if:
    - A. The power supply cord or plug has been damaged.
    - B. Anything has fallen or been spilled into the unit.
    - C. The unit does not operate correctly.
    - D. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work must be done by a qualified service technician for warranty repairs.

CAUTION

THIS AMPLIFIER HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE POWER RESERVE FOR PLAYING MODERN MUSIC WHICH MAY REQUIRE OCCASIONAL PEAK POWER. EXTENDED OPERATION AT ABSOLUTE MAXIMUM POWER IS NOT RECOMMENDED SINCE THIS COULD DAMAGE THE ASSOCIATED LOUDSPEAKER SYSTEM. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE MASTER VOLUME CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

KUSTOM

Kustom Inc., 4940 Delhi Pike, Cincinnati, OH • USA
(800) 999-5558 Fax: (513) 347-2192 / www.kustom.com



1.) Microphone Input - this is a 3 cond. XLR input jack for plugging in Lo-Z microphones. It is intended for microphones and has 15V Phantom Power for condensor microphones.

2.) Piezo Input - this is a 1/4" 2 conductor input jack for plugging in your instrument. It is intended for an acoustic/electric guitar with a piezo-electric pickup.

3.) Active Input - this is a 1/4" 2 conductor input jack for plugging in your instrument and will place a -20db pad in the circuit which will allow use of active on-board electronics from pre-amplified guitars. This will help keep the signal extremely clean.

4.) Gain 1 - this control is the preamp input for the microphone input. Slowly increase the control to increase the volume.

5.) Effect On/Off- this switch will turn the effects for the microphone channel on and off.

6.) Bass - this control is the bass control for the microphone channel. It is passive and set to shelve frequencies at 100 Hz. Turning it fully clockwise, the signal is unaltered. Turning it counterclockwise, the low will be rolled off -12db.

7.) Middle - this control is the midrange control for the instrument channel. It is passive and set to shelve frequencies at 1KHz.Turning it fully clockwise, the signal is unaltered. Turning it counterclockwise, the low will be rolled off -12db.

8.) Phase Reversal On/Off- this switch will reverse the phase on pins 2 & 3 for the microphone to help with feedback or overly loud bass frequencies from the microphone channel.

9.) Treble - this is the high frequency tone control. for the microphone channel. It is passive and set to shelve frequencies at 3KHz. Turning it fully clockwise, the signal is unaltered Turning it counterclockwise, the highs will be rolled off -12db.

10.) Gain 2 - this control is the preamp input for the instrument input. Slowly increase this control to increase the volume on the instrument inputs.

11.) Effects On/Off- this switch will turn the reverb for the instrument channel on and off.

12.) Bass - this control is the bass control. It is passive and set to shelve frequencies at 100 Hz. Turning it fully clockwise, the signal is unaltered Turning it counterclockwise, the low will be rolled off -12db.

13.) Treble- this is the high frequency tone control. It is passive and set to shelve requencies at 3KHz on the instrument channel. Turning it fully clockwise, the signal is unaltered. Turning it counterclockwise, the highs will be rolled off -12db.

14.) Feedback On/Off - this switch will engage the Feedback control.

15.) Feedback - this control is a cut filter notch with an extremely narrow width. It sweeps between 50Hz & 500Hz and "fine tunes" the midrange of the acoustic guitar. This helps elimate unwanted "ringing" tones.

16.) Master Volume - this is the overall volume level control for the amplifier. To keep distortion at a minimum, we suggest you turn this up between 1/2 and 2/3, then bring up the individual channels.

17.) Effects On/Off- this switch will turn the digital effects for the entire unit on and off.

18.) Effects Level - this control adds the digital effects and mixes them into the main signal buss.

19.) Effects Program - this control selects between the different digital effects. Effects include: 4 Reverbs, 1- Delay, 1-Chorus, 2-Chorus & Reverb.

20.) Jewel Light - this jewel light lets you know that the amplifier is on.

21.) Power - this switch turns on and off the AC power to the amp.

Back Panel - (not pictured)

Speaker Out - this is a 2 conductor 1/4" speaker output jack. This will disconnect the internal speaker and allow an external speaker cabinet to be employed. Rating is 8 ohms.

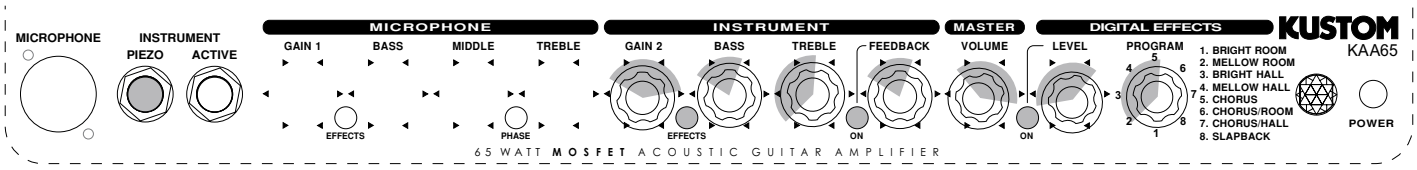
Line Output - this is a 2 conductor 1/4" line output jack. This will allow an external amplifier or mixing board to be supplied with the signal from this amp.

Effects Loop I/O - these are 2-2 conductor 1/4" jacks. This will allow an external effects device or equalizer to be patched back in before the power amp section in this amp. One is send and the other is return.

Footswitch Jack - this is a 2 conductor 1/4" jack. This is for hooking up a footswitch to turn on/off the onboard digital effects.

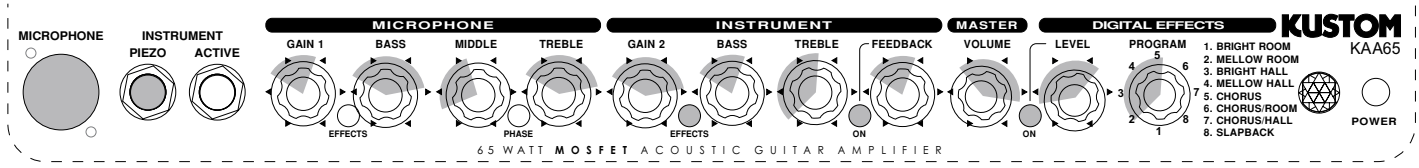
Suggested Settings

(These settings are general starting points. They are designed to get you close to the sound you are looking for. If the control is not shown, then it doesn't apply to this particular sound.)



Standard Single Input Setup - in this setup your acoustic/electric guitar is plugged into input 2. (Remember, if you are using an active guitar or pre-amplified guitar, select the active input. We also suggest that you turn it's output level to about mid way up and this will give you a cleaner sound as well as giving you available headroom for leads.) The tone controls follow both inputs.
Of course, you can adjust the tone controls to any desired sound, but in this setup we suggest these tone control settings. It will deliver a clear, clean sound that has enough top end clarity to cut through. Add low and low mid for a beefier presence, but be careful as this can "muddy up" the sound.

Adjust the reverb and chorus to suit the music or to your taste.



Standard Dual Input Setup - in this setup two inputs are utilized. Guitar is plugged into guitar input jack and a Hi-Z microphone is plugged into mic/line Input. Assuming you are also using a microphone, plug it into the mic/line jack and slowly turn up the mic/line volume control. Balancing the two types of inputs gives you a much more natural acoustic guitar sound.
You could also plug in any combination of inputs such as: keyboards, microphones or other guitars.

This can also be a basic mini-PA system. It could be used for plugging in a CD player or cassette decks and a microphone for singing. It can be used for playing over prerecorded tapes with mixing capabilities.

As mentioned earlier, you can adjust the tone controls to any desired sound, but in this setup we suggest these tone control settings. Of course it depends on the listening environment. It will deliver a clear, clean sound that has enough top end clarity to let the acoustic sound cut through.

Adjust the reverb to suit the music or to your taste.